

Abstract :**Background & Objective:**

Appendicitis is the most common cause of acute abdominal pain requiring surgical intervention.

The infection of a surgical wound is the most common complication in the acute appendicitis, which adds the expenses of drug and cure together with increasing the length of hospitalization and cure duration for patients who are mostly the effective class of society.

Various studies prove the necessity of use prophylactic antibiotic in order to the reduction of surgical wound infection.

This research was preformed to compare efficacy of prophylactic Ampicillin versus Metronidazol and Gentamicin in the prevention of wound infection to choose drug regime with less side complication and accessible and inexpensive.

Material and methods:

In this randomized clinical trial, 300 patients diagnosed as having acute uncomplicated appendicitis and hospitalized in the surgery unit of fatemi hospital in Ardabil were appendectomied, they have not any ground risk factor for the increase of wound infection. The patients were divided randomly into two group and received two regime prophylactic Ampicillin or Metronidazol plus Gentamicin and this patients fallow up for one month and results were analyzed in SPSS (version15) software and analytical statistics such as chi-square and t-test and logistic regression.

Results:

After fallow up of patients during one month, 20 cases of surgical wound infection were reported, 11 patientes of Ampiallin group and 9 patients of Gentamicin and Metronidazol group. This finding indicated that there was not significant statistical difference between Ampicillin and Metronidazol plus Gentamicin in prevention of wound infection after appendectomy.

Conclusion:

Considering that no significant difference between Ampicillin and Metronidazol plus Gentamicin in prevention of wound infection after appendectomy, because of less side complication, unidrug and economical (accessible and inexpensive) of Ampicillin and with goal reduces the drug resistance against the standard regime Metronidazol plus Gentamicin (the selective treatment is in the complicated appendicitis and surgical wound infection) with rational use of antibiotics is suggested using of Ampicillin as a prophylactic antibiotic in prevention of wound infection after appendectomy.

Key words: *Acute uncomplicated appendicitis, Prophylaxis of wound infection, Ampicillin, Metronidazol, Gentamicin.*